

# SPECIFICATION

Electronic Version 1.2.8

Stylesheet Version 1.0

## **[Insert title of invention]Criteria Based Marketing for Telephone Directory Assistance**

### Background of Invention

[0001]

[0002] 1. Field of the Invention This invention relates to systems for providing telephone toll services such as, but not limited to, directory assistance or long-distance calling.

[0003] 2. Description of Prior Art The need for phone customers to locate the name, address and number of businesses such as airlines, floral shops and auto repair shops has been around for almost as long as the phone has been in existence.

[0004] Currently most phone systems charge extra for the look up of the names and addresses and numbers of general or specific businesses. This can get to be costly and many telephone customers find such directory assistance charges to be excessive.

[0005] There is also a current need for many businesses to market to a wide pool of consumers with targeted advertisement. This can be done efficiently through the use of SIC codes or "Standard Industry Codes." By knowing exactly what a particular consumer is looking for at that particular moment a company can target their scope of interest with an ad.

[0006]

The use of advertisements within a telephone system is well known in the art. United States Patent 4,850,007 by Marino is for a "Telephone toll service with advertising". It is a system for providing an economical telephone toll service in which a telephone subscriber selects the economical service by, for example, sending an appropriate signal, and then dials his directory assistance call or other telephone toll

call. After the caller's options are determined, and typically before signaling for the call is commenced, a recorded-announcement of an aural or visual nature is connected to the subscriber's line, with the announcement consisting of at least one *advertisement*. The advertisements are selected from a databank according to some predetermined technique of selection, which may include any number of factors or features to make the service attractive to subscribers and of a nature to make the service also sufficiently rewarding to advertisers. The advertisement is not however, tied to the caller's specific interests or SIC code based on the number dialed.

[0007] United States Patent 5,448,625 by Lederman is a "Telephone advertising method and apparatus." It is a method and apparatus for routing a telephone call through a telephone network from a caller to a called party designated by the caller via advertising service apparatus that operates in two modes successively, the parties being in communication with each other in one mode and ads are selected from storage during that mode and the ads are impressed on one or both of the parties during a different mode. Selection of ad messages for use is controlled by many criteria. Delivery of the advertisements is recorded for accounting purposes. The modes may alternate between message intervals whose duration is determined by ad message length and communication intervals whose length is determined by a talking time timer. Still there is a need for better selection criteria.

[0008] United States Patent 5,852,775 by Hidary is a "Cellular telephone advertising system." It discloses a cellular telephone system, which is provided with an ad server and a memory for holding various commercial messages. The messages are either generic or are tailored for specific demographically selected subscribers or geographic cells. When communication is established either between a subscriber or a nonsubscriber, at least one of them receives either a generic or a specific commercial message. These advertisements are not geared to the needs of a particular caller.

[0009] United States Patent 5,652,784 by Blen is an "Automatic telephone advertising provided in lieu of dial-tone." This invention discloses a telephone advertising service providing a short advertising message through a telephone receiver as a telephone call is initiated. Several different messages are offered in different sets of channels, with the messages changing depending on the time of day. When a prohibit service

signal is active, the subscriber line is switched directly to the telephone exchange.  
These messages are not targeted towards the interests of a particular caller.

[0010] There is still room for improvement within the art.

## Summary of Invention

[0011]

[0012] It is a general object of the present invention to have a process that allows the cross marketing of phone customers when they ask for directory assistance.

[0013] The current invention is such that if a consumer is interested in airline tickets and they are calling Directory Assistance an ad based on their interest is played to that consumer. An airline or travel related ad will have a much higher impact and be received with a much higher level of interest with this consumer than to someone who is watching the evening news and is shown an airline ad.

[0014] By knowing exactly what a particular consumer is looking for at the moment they are looking; you can target their scope of interest with an ad. Using SIC code or "Standard Industry Code" or even some other variable such as having a live operator select which ad would be appropriate does this.

[0015] The concept is to use the information obtained in the 10 second listing request to play a targeted message and offer instant access to the product or service related to that message via "live call transfer" or "press 1 to be transferred to (the advertiser) now".

[0016] For non-SIC code ads general, non-category specific ads such as "refinancing your home" or a home improvement ad can be played. These ads can be played based on the point of call. This can be done by setting up calls to be routed to a specific ad if the point of the caller's location is within a specific area code, zip code, city block or other parameter.

[0017] This would be helpful for companies like Home Depot, who might want to buy ad space in zip codes of "mostly owner occupied residences", or pay day advance stores, who might want to buy advertisement for areas which are more economically

depressed.

[0018] The type of ad and when the ad is played, can be controlled to a highly specific degree.

[0019] This system involves Point of call routing which is the routing an inbound 800 number call based on the location of the caller and routing the call to any predetermined location using zip code, area code, area code and prefix or city block maps.

[0020] Ads can be bought to target specific competitor names or industry codes. They can also be bought by markets delineated by zip code, area code city block or statewide.

## Brief Description of Drawings

[0021]

[0022] Without restricting the full scope of this invention, the preferred form of this invention is illustrated in the following drawings:

[0023] FIG. 1 is a block diagram of a telephone toll system embodying the present invention;

[0024] FIG. 2 shows a block diagram of parts of the system involved with selecting the type of announcement connected to a particular subscriber's line;

[0025] FIG. 3 gives an example of Division Structure of SIC codes;

[0026] FIG. 4 gives an example of a Major Group of the SIC codes;

[0027] FIG. 5 is a schematic of the system; and

[0028] FIG. 6 gives a flowchart of the system.

## Detailed Description

[0029]

[0030] *Preferred Embodiment*

[0031] The preferred embodiment of the invention is a process that allows the cross marketing of phone customers asking for directory assistance.

[0032] In FIG. 1, the local telephone station 11 is the typical telephone handset, in the usual case, and is connected by the typical local loop wires and connections to a local telephone switching system 12 which in turn connects through a toll switching system 14 to the total telephone network. Interconnected with the local telephone switching system 12 and the toll switching system 14 is the advertising message system 13 which is adapted to provide the directory assistance which has been generally summarized above.

[0033] In general, the local telephone station 11 is used by a local telephone customer, the User 10, indicated schematically.

[0034] The internal connections of the system are, in more detail, the following. The line from local telephone station 11 will be routed, through portions of switching elements 15, to the directory assistant module of the local switching system 12 if that is the nature of the customer's request, and in general, this may have been reached by dialing a specific phone number such as 1-800-Dealers.

[0035] It is anticipated that the broadest volume of use will result from long distance calling. The preferred embodiment will use a routing automatic number identification (ANI) within local telephone switching system 12, together with the subscriber test equipment in advertising message system 13, will identify the local customer in question as being one who wants to receive reduced directory assistance or long distance calling so that his incoming line will automatically be connected to advertising message system 13 before his toll call is completed.

[0036] In all of the foregoing situations identified in local telephone switching system 12, the result will be that a signal is sent to advertising message system 13 which results in a control signal being sent to toll switching system 12 to switching elements 16 to prevent the further progress of the user's call until the new features of this toll service have been provided. Therefore, at this point, the local telephone subscriber is not in contact with the larger telephone network.

[0037] In point of fact, this message may be of either an aural or visual nature, especially

if the local subscriber has made available a monitor or television set connected to his telephone line. When this message ends, the control network within toll switching system 14 then removes the block on the signaling for the toll call and the call goes out over the network in the usual fashion.

[0038] The current invention is as follows if a consumer is interested in airline tickets RIGHT NOW and they are calling Directory Assistance the correct ad played to that consumer, an airline or travel related ad, will have a much higher impact and be received with a much higher level of interest than to someone who is watching the evening news and is shown an airline ad.

[0039] By knowing exactly what a particular consumer is looking for at the moment they are looking you can target their scope of interest with an ad. Using SIC code or "Standard Industry Code" or even some other variable such as having a live operator select which ad would be appropriate does this.

[0040] The concept is to use the information obtained in the 10 second listing request to play a targeted message and offer instant access to the product or service related to that message via "live call transfer" or "press 1 to be transferred to (the advertiser) now".

[0041] For non SIC code ads general, non-category specific ads such as "refinancing your home" or a home improvement ad can be played. These ads can be played based on the point of call. This can be done by setting up calls to be routed to a specific advertisement if the point of the callers location is within a specific area code, zip code, city block or other parameter.

[0042] This would be helpful for companies like Home Depot, who might want to buy ad space in zip codes of "mostly owner occupied residences" or pay day advance stores which may want to purchase advertisement for areas that are more economically depressed.

[0043] The type of ad and when the ad is played can be controlled to a highly specific degree.

[0044] In the preferred embodiment the system will use Point of call routing, which is the

routing of an inbound 800 number call based on the location of the caller and connecting that caller to any predetermined location using zip code, area code, area code and prefix or city block maps.

[0045] Ads can be bought to target specific competitor names or industry codes. They can also be bought by markets delineated by zip code, area code city block or statewide.

[0046] The advertisements could also have been chosen on a random basis, or they could have been chosen to provide sufficient exposure to each of the advertisers who provided the ads for this service. In any event these advertisements will be stored in a large-scale mass memory or memory means.

[0047] In all of the foregoing versions of the service, it should be apparent that the interactive logic could be extended to make it possible for the customer to indicate, e.g., by dialing appropriate digits, that he wishes written material to be sent to him or that he wishes to talk to a salesman--now or later.

[0048] We have attempted to lay out in FIG. 2 a chart illustrating most of the foregoing message choice criteria in a logical manner.

[0049] We have disclosed a sample of the SIC Division Structure in FIG. 3 and the SIC Major Group 58 in FIG. 4 to display the industry standard codes that can be used in the selection process.

[0050] FIG. 5 is a schematic of how system 1 works. The User 10 calls and is connected to a directory assistance number. The User 10 requests a number or a type of service or good, the system uses this as part of the selection criteria which is used by a selection means 50 such as a computer processor and selects an advertisement from the database 60 and the advertisement is played back to the User 10.

[0051] FIG. 6 is a basic flowchart of the process. In Step 100, the User 10 calls the system 1. The User 10 then requests a specific number of a company or a type of goods or services in Step 110. The system 1 uses the request, along with additional information such as the locations from where call was placed and other targeting information to select an ad from the advertising database 60 in step 120. The system 1 retrieves the

ad and plays it for the User 10 in step 130. In step 140, the system 1 asks "is there a connection option for this ad?" If yes, the User 10 is asked if they want to opt to be connected to the advertiser's number 150. If yes, the User 10 is connected to the advertiser's number 160. If no, the User 10 is connected to their selected number 170. If there is no connection option for this ad, the User 10 is connected to their selected number 170.

[0052]      *Additional Embodiment*

[0053]      *This system could also be used in a wireless environment with Handheld PCs or an internet or chat environment.*

[0054]      *Advantages* The current invention provides much needed inexpensive directory assistance. The user calls a unique number for directory assistance, an operator answers that call and asks the user of his/her desired phone number, the system then uses this phone number as one of the basis for the selection criteria to select an advertisement for the system to play for the user. After the user listens to the advertisement, the system will provide the user with the desired phone number. The system may have the option for the user to select on or contact another company for the service.

[0055]      *Conclusion, Ramifications, and Scope*

[0056]      Although the present invention has been described in considerable detail with reference to certain preferred versions thereof, other versions are possible. For example, other protocol or formats could be used, another type of marketing codes can be used, or a different type of call besides directory assistance can be used. Therefore, the point and scope of the appended claims should not be limited to the description of the preferred versions contained herein.